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ATTORNEY DOCKET NO.	CONFIRMATION NO.	
33470US	1323	
EXAMINER		
DOROSHENK, ALEXA A		
ART UNIT	PAPER NUMBER	
1764		
	33470US  EXAM  DOROSHENI  ART UNIT	

Please find below and/or attached an Office communication concerning this application or proceeding.

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6.15	Applicati n N .	pplicant(s)		
	08/951,201	WOODARD ET AL.		
Office Action Summary	Examiner	Art Unit		
	Alexa A. Doroshenk	1764		
The MAILING DATE of this communication appears on the cover sheet with the correspondenc address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a review within the statutory minimum of thirt vill apply and will expire SIX (6) MON cause the application to become AB	eply be timely filed y (30) days will be considered timely. THS from the mailing date of this commur ANDONED (35 U.S.C. \$ 133)	nication.	
1) Responsive to communication(s) filed on <u>02 A</u>	pril 2002			
<u> </u>	s action is non-final.			
3) Since this application is in condition for allowa		ters prosecution as to the mo	orito io	
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.E	). 11, 453 O.G. 213.	1115 15	
4)⊠ Claim(s) <u>1-6 and 12-21</u> is/are pending in the ap	onlication			
4a) Of the above claim(s) <u>12-21</u> is/are withdraw	•			
5) Claim(s) is/are allowed.	ir nom consideration.			
6)⊠ Claim(s) <u>1-6</u> is/are rejected.				
7) Claim(s) is/are objected to.				
8) Claim(s) are subject to restriction and/or	election requirement			
Application Papers	election requirement.			
9) The specification is objected to by the Examiner.				
10) The drawing(s) filed on is/are: a) accept	ted or b) objected to by th	e Examiner.		
Applicant may not request that any objection to the				
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.				
If approved, corrected drawings are required in repl				
12)☐ The oath or declaration is objected to by the Exa	miner.			
Priority under 35 U.S.C. §§ 119 and 120				
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).		
a)☐ All b)☐ Some * c)☐ None of:				
1. Certified copies of the priority documents	have been received.			
2. Certified copies of the priority documents	have been received in Ap	plication No		
<ul> <li>3. Copies of the certified copies of the priorit         application from the International Bure</li> <li>* See the attached detailed Office action for a list o</li> </ul>	ty documents have been r eau (PCT Rule 17.2(a)).	eceived in this National Stage	;	
14) Acknowledgment is made of a claim for domestic			(cotion)	
a) The translation of the foreign language prov			cation).	
15) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. §	§§ 120 and/or 121.		
Attachment(s)		· <del>-</del>		
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Int	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152)		
Patent and Trademark Office O-326 (Rev. 04-01)				

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#### **DETAILED ACTION**

### **Continued Prosecution Application**

1. The request filed on April 2, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/951,201 is acceptable and a CPA has been established. An action on the CPA follows.

#### Election/Restrictions

2. This application contains claims 12-21 drawn to an invention non-elected by original presentation in Paper No. 11. A complete reply to the final rejection must include cancellation of non-elected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harandi et al (4,788,366).

With respect to claim 1, Harandi et al disclose an apparatus comprising:

a reactor (col. 3, lines 48-51 and reference number 20);

an inlet line into reactor (col. 3, lines 48-51 and reference number 11);

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effluent line from reactor (col. 3, lines 53-61 and reference number 22); and separator (col. 4, lines 38-41 and reference number 26).

Harandi et al teaches wherein a second inlet line from a source of catalyst into said reactor provides fresh catalyst for the reactor (col. 6, lines 55-56 and col. 7, lines 51-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate this teaching into the reactor vessel (20) as a means for providing fresh catalyst for a more efficient reaction. It would have also been obvious to one of ordinary skill in the art at the time the invention was made to use the effluent line as a means to withdraw used catalyst in order to allow space for the catalyst being added to the system.

With respect to claim 2, Harandi et al disclose the use of filters (col. 7, lines 64-66) in the separator means. Since the effluent line is connected to the separator means, the filters are operably connected into said effluent line.

With respect to claim 4, Harandi et al disclose a reactor inlet from a second source (col. 3, lines 51-52 and reference number 21).

With respect to claim 5, Harandi et al disclose the effluent line (22) as operably connected to an inlet source of feedstock or recycle (21) wherein the feedstock or recycle could contain heavies (col. 3, lines 41-52).

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harandi et al in view of Lashier et al (5,689,028).

The modified apparatus of Harandi et al disclose all of the claimed structure except for an inlet for catalyst system deactivator. Lashier et al disclose a process to

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regulate olefin production in which a catalyst comprising a chromium source, a pyrrole-containing compound and a metal alkyl (col. 1, lines 55-59) is deactivated in the reactor effluent stream (col. 5, line 65- col. 6, line 21). Lashier et al disclose that the reaction products can be prepared from a conventional gas phase catalyst system (col. 4, line 65- col. 5, line 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an inlet for catalyst deactivator into the effluent stream of Harandi et al's modified gas phase catalyst system in order to regulate the production of olefin during trimerization once it has left the reactor.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harandi et al in view of Mehra et al (5,521,264).

The modified apparatus of Harandi et al disclose all of the claimed apparatus, including heavies removal, but is silent as to a reactor inlet line for solvent. Mehra et al disclose an apparatus similar to that of Harandi et al including a separator, a reactor, filters, and a solvent inlet line (col. 13, lines 61-65 and reference number 98). Mehra et al teaches the use of a solvent to absorb ethylene, higher alpha olefin comonomers, and heavier hydrocarbons (col. 13, lines 61-65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a solvent inlet in optimal operable connection in the modified apparatus of Harandi et al to incorporate the teaching of Mehra et al and further remove heavies during operation.

## Response to Arguments

### **Drawings**

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The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on April 18, 2000 have been approved.

#### 35 USC 112

The 35 USC 112, second paragraph rejection of claim 4 is withdrawn due to applicant's amendment of paper no. 14.

#### 35 USC 103

Applicants argue that claim 1 is patentably distinguishable over the prior art of Harandi et al. because there is no "inlet line into said reactor from a source of catalyst" and that neither Harandi et al. nor the other art of the rejection provide separate lines for feeding feedstock alone and catalyst alone into the reactor.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., separate lines for feeding feedstock alone and catalyst alone into the reactor) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicants state only that a second inlet line is from a source of catalyst and do not claim the functionality of the second inlet line. Inlet line (11) as presented by the examiner in paper no. 11 is from an FCC Unit (10), which contains a catalyst and is therefore a source of catalyst with which line (11) is in communication.

Further, Harandi et al. teach separate feed (210) and catalyst (250) inlet lines into reactor (220) which relates to reactor (20) of the rejection.

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Applicant's arguments regarding the rejection of claims 3 and 5 are directed toward the inlet lines of Harandi et al. as addressed above.

#### Conclusion

7. This is a continuation of applicant's earlier Application No. 08/951,201. All claims are drawn to the same invention claimed in the earlier application and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexa A. Doroshenk whose telephone number is 703-305-0074. The examiner can normally be reached on Monday - Thursday from 8:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knode can be reached on 703-308-4311. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

NEARY BY JOHNSON
PRIMARY EXAMINER
GROUP 1100

AAD

September 3, 2002